## APPENDIX E VARIANCE REPORTS

INTERNATIONAL TECHNOLOGY CORPORATION	Variance No: PARCEL147QAUGUST02.VR1		
	Linked w/NC No:		
	Date of Issue: 8-28-02		
	Page _1 of 1		
Project Name: Fort McClellan - CK 10	Project Number: 796887.11020300		
-Variance Report -			
I.Description: (by the person identifying the change)			
FINAL SITE-SPECIFIC FIELD SAMPLING PLAN (FSSFSP), FORMER RANGE 43, PARCEL 97Q, RANGE, CHOCCOLOCCO CORRIDOR, PARCEL 144Q-X AND IMPACT AREA, CHOCCOLOCCO CORRIDOR, PARCEL 147Q-X			
The Final Site-Specific Field Sampling Plan (FSSFSP) proposed using hollow-stem augers to install residuum monitoring well HR-147Q-MW01. Residuum monitoring well HR-147Q-MW01 was installed using air rotary drilling methods.			
Identified by: Kyle Wilson, Geologist	Date: 8-28-02		
II. Justification for Variance:			
The FSSFSP proposed using hollow-stem augers at residuum monitoring well location HR-147Q-MW01. However, during drilling activities auger refusal was encountered at depths ranging from 3 feet below ground surface (bgs) too 6 feet bgs. Therefore, a decision was made to install the monitoring well using air rotary drilling techniques. Groundwater was encountered at approximately 45 feet bgs during air rotary drilling and the well was successfully installed at 65 feet bgs. This variance will not alter the intent of the site investigation at Parcel 147Q-X.			
III. Applicable Document/Work Plan: (by the person identifying the cl	nange)		
Final Site-Specific Field Sampling Plan, Site-Specific Safety and Health Plan, and Site Specific Unexploded Ordnance Safety Plan Attachments, Former Range 43, Parcel 97Q, Range, Choccolocco Corridor, Parcel 144Q-X, and Impact Area, Choccolocco Corridor, Parcel 147Q-X, Fort McClellan, Calhoun County, Alabama, April 2002.			
Distribution List:	- Signatures -		
<ol> <li>Jeanne Yacoub, IT Project Manager</li> <li>Steve Moran, IT Technical Lead</li> </ol>	Requested by: Jeffrey Tarr, PG - IT Site Manager 8-28-2002		
<ol> <li>Jeffrey Tarr, IT Site Manager</li> <li>Randy McBride, IT QA Officer</li> </ol>	Approved by: 1000 Date		
<ul><li>5. Mr. Ellis Pope, US Army Corps of Engineers</li><li>6. Mr. Ross McCollum, US Army Corps of Engineers</li></ul>	Project Manager Approval		

Project Manager Approval:

QA Approval: Randy McBride

INTERNATIONAL TECHNOLOGY CORPORATION	Variance No: PARCEL97QAUGUST02.VR1 Linked w/NC No: x  Date of Issue: 8-28-02	
	Page _1 of 1	
Project Name: Fort McClellan – CK 10	Project Number: 796887.11020300	
-Variance Report -		
I.Description: (by the person identifying the change)		
FINAL SITE-SPECIFIC FIELD SAMPLING PLAN, FORMER RANGE 43, PARCEL 97Q		
The Final Site-Specific Field Sampling Plan proposed drilling residuum well HR-97Q-MW01 using hollow-stem augers and collecting a groundwater sample from the well. However, the monitoring well was not installed and a groundwater sample was not collected.		
Identified by: Jeffrey J. Tarr, PG – IT Site Manager	Date: 8-28-02	
II. Justification for Variance:		
During drilling at proposed residuum well location HR-97Q-MW01, groundwater was not present after drilling to 100 feet below ground surface (bgs). The IT Technical Lead and IT Site Manager made a decision after consultation with the Base Closure Team including the U.S. Army Corps of Engineers, Alabama Department of Environmental Management, U.S. Environmental Protection Agency and Fort McClellan to discontinue drilling operations if groundwater was not encountered within 100 feet bgs. The decision to stop drilling was based upon the fact that the likelihood of lead contamination being present in groundwater at depths greater than 100 feet bgs was extremely minimal. Therefore, drilling operations were stopped and a groundwater sample was not collected.		

III. Applicable Document/Work Plan: (by the person identifying the change)

Final Site-Specific Field Sampling Plan, Site-Specific Safety and Health Plan and Site-Specific Unexploded Ordnance Safety Plan, Former Range 43, Parcel 97Q, Range – Choccolocco Corridor, Parcel 144Q-X, and Impact Area, Choccolocco Corridor, Parcel 147Q-X, Fort McClellan, Calhoun County, Alabama, April 2002.

## **Distribution List:**

- 1. Jeanne Yacoub, IT Project Manager
- 2. Steve Moran, IT Technical Lead
- 3. Jeffrey Tarr, IT Site Manager
- 4. Randy McBride, IT QA Officer
- 5. Mr. Ellis Pope, US Army Corps of Engineers
- 6. Mr. Ross McCollum, US Army Corps of Engineers

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Requested by: Jeffrey Tarr, PG - IT Site Manager

8-28-200Z

Approved by:

09/30/02

Project Manager Approval:

acont 10/23/0:

QA Approval:

10-17-02

Date

INTERNATIONAL TECHNOLOGY CORPORATION	Variance No: PARCEL144QSEPTEMBER02.VR1	
	Linked w/NC No:	
	Date of Issue: 9-17-02	
	Page _1 of 1	
Project Name: Fort McClellan - CK10	Project Number: 796887.11020300	
-Varianc	e Report -	
I.Description: (by the person identifying the change)		
FINAL SITE-SPECIFIC FIELD SAMPLING PLAN, RAN	GE - CHOCCOLOCCO CORRIDOR, PARCEL 144Q-X	
The Final Site-Specific Field Sampling Plan (FSSFSP) proposed the collection of a groundwater sample from residuum monitoring well HR-144Q-MW01. However, a groundwater sample was not collected.		
Identified by: Mark L. Shoemaker - Geologist	Date: 9-17-02	
II. Justification for Variance:		
During drilling activities at residuum well HR-144Q-MW01 competent bedrock was encountered prior to reaching groundwater. Several attempts were made to drill deeper for groundwater, but bedrock was encountered and groundwater was not present. Based upon previous drilling and well installation activities at Fort McClellan, groundwater tends to migrate along the bedrock \residuum interface. Therefore, a decision was made to install the well on top of bedrock with the intent of having groundwater enter the well screen during periods of heavy rainfall. To date, groundwater has been present in the well, but not enough to collect samples. Currently, this well is being monitored for the presence of groundwater. Should this well contain sufficient groundwater, samples will be collected for chemical analysis.		
III. Applicable Document/Work Plan: (by the person identifying the change)		
Final Site-Specific Field Sampling Plan, Site-Specific Safety an Plan Attachments; Former Range 43, Parcel 97Q, Range, Choc Corridor, Parcel 147Q-X; Fort McClellan, Calhoun County, Ala	colocco Corridor, Parcel 144O-X, and Impact Area, Choccolocco	
Distribution List:	- Signatures -	
<ol> <li>Jeanne Yacoub, IT Project Manager</li> <li>Steve Moran, IT Technical Lead</li> </ol>	Requested by: Jeffrey Tarr, PG - IT Site Manager 9-17-2002.	
<ul><li>3. Jeffrey Tarr, IT Site Manager</li><li>4. Randy McBride, IT QA Officer</li></ul>	Approved by: Approved by:	

Approved by:

Project Manager Approval:

QA Approval:Randy McBride

5. Mr. Ellis Pope, US Army Corps of Engineers
6. Mr. Ross McCollum, US Army Corps of Engineers

	Variance No: PARCEL147QAPRIL2003.VR1 Linked w/NC No:		
Shaw ** Shaw Environmental & Infrastructure, Inc.	Date of Issue: 4-15-03		
	Page 1 of 1		
Project Name: Fort McClellan	<b>Project Number</b> : 796887.11020300		
-Varian	ce Report -		
I.Description: (by the person identifying the change)			
FINAL SITE-SPECIFIC FIELD SAMPLING PLAN (FSSFSP), FORMER RANGE 43, PARCEL 97Q, RANGE, CHOCCOLOCCO CORRIDOR, PARCEL 144Q-X AND IMPACT AREA, CHOCCOLOCCO CORRIDOR, PARCEL 147Q-X			
The Final Site-Specific Field Sampling Plan (FSSFSP) proposed the collection of a groundwater sample from monitoring well HR-147Q-MW01. However, a groundwater sample was not collected.			
Identified by: Jeffrey J. Tarr, PG – Shaw Site Manager	Date: 4-15-03		
II. Justification for Variance:			
During groundwater sampling activities in August \ September 2002, groundwater was present in monitoring well HR-147Q-MW01 but not enough to collect a sample. Currently, HR-147Q-MW01 is being monitored for the presence of groundwater. Should this well contain enough groundwater, a sample will be collected for chemical analysis.			

## III. Applicable Document/Work Plan: (by the person identifying the change)

Final Site-Specific Field Sampling Plan, Site-Specific Safety and Health Plan, and Site-Specific Unexploded Ordnance Safety Plan Attachments; Former Range 43, Parcel 97Q, Range, Choccolocco Corridor, Parcel 144Q-X, and Impact Area, Choccolocco Corridor, Parcel 147Q-X, Fort McClellan, Calhoun County, Alabama, April 2002.

$\mathbf{D}$	<u>istribution List</u>	:
1	T	l. 01 D

- 1. Jeanne Yacoub, Shaw Project Manager
- 2. Steve Moran, Shaw Technical Lead
- 3. Jeffrey Tarr, Shaw Site Manager
- 4. Randy McBride, Shaw QA Officer
- 5. Stanley Parrott, US Army Corps of Engineers
- 6. Lee Coker, US Army Corps of Engineers

- Signatures -

Requested by:

Spay ! Jan 4-15.0

Approved by:

Stanley E. Parsott 4-16-03 D

Project Manager Approval

QA Approval:

4-22-03